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UNVEILING THE THERAPEUTIC POTENTIAL OF DASAMOOLA HARITAKI AVA-LEHA IN TAMAKASWASA WSR TO BRONCHIL ASTHMA IN CHILDREN - A CRIT-ICAL REVIEW

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ABSTRACT

Children are the cornerstone of a nation's present and future prosperity. However, the rapid advancement of industrialization, modern lifestyle, and environmental pollution has led to a significant increase in respiratory tract infections, particularly Bronchial asthma, among children, which require proper care and attention. *Dasamoola Haritaki*, a unique Poly-herbal preparation, can be an ideal formulation for managing *Tamaka shwasa*, the Ayurvedic counterpart of Bronchial asthma. The majority of the ingredients in *Dasamoola Haritaki* possess *Ushna*, *Teekshna*, and *Kleda hara—Vatanulomaka* qualities, which can help reduce morbid *Vata* and *Kapha* doshas and can act as Ojo vardhaka, too. Therefore, *Dasamoola Haritaki* can serve preventive and palliative needs in managing *Tamakaswasa*.

Keywords: Dasamula Hareetaki, Tamakaswasa, Bronchial asthma

INTRODUCTION

Children are the backbone of a nation's present and future prosperity. Healthy children are more likely to blossom into healthy adults. Child health is rightfully regarded as a paramount concern in a progressive society. Consequently, there has been a surge of interest in enhancing their well-being and fostering a brighter tomorrow for our young citizens. Still, Due to the steep advancement in the arena of industrialization, modern way of life, environmental pollution with undue exposure to fumes, dust, etc. [1], Respiratory tract infections are becoming more common in children, which accounts for more than 50% of patients attending the pediatric OPD in developing and even developed countries worldwide[2,3]. This could be because of their anatomical and physiological peculiarities, such as hypertrophied lymphoid tissues [4], mucous hypersecretion [5], immunological considerations [6], etc., which could invariably affect the functional ability of the respiratory system. Bronchial asthma is a chronic inflammatory disorder of the airways associated with airway hyper-responsiveness that leads to recurrent episodes of wheezing, breathlessness, chest tightness and coughing, particularly at night or in the early morning. These episodes are usually associated with widespread but variable airway obstructions, often reversible spontaneously or with treatment [G]. In India, the prevalence of asthma in school-going children has been reported between 4-20% in different geographic regions. The prevalence has increased twice in the last two decades [8]. The risk for developing asthma depends on a complex interaction of hereditary and environmental factors such as genetic predisposition, peri-natal factors, exposure to allergens, infections, environmental air pollution, diet and obesity [9].

Tamakaswasa is one among the five varieties of Shwasa roga. Morbid Vata and Kapha are the two factors involved in its etiopathogenesis, where vitiated Kapha causes Margavarodha [Obstruction] of Pranavayu in Ura Pradesh, due to which Pranavayu adopts Viloma gathitwa resulting in Swasakrichrata[Dyspnoea], Gurgurukata[Wheeze], Pranaprapeedana [Chest discomfort], Muhur – Muhurswasa [Bouts of Dyspnoea] etc [10]. Balyavasta [Childhood period] is a period predominated by Kapha dosha, and repeated exposure to Vata-Kapha prakopaka Ahara-vihara's like Raja, Dhuma, Sheetodaka [Dust, smoke, pollens, cold foodstuffs] etc. can make the condition Parama Durjava [very difficult to cure], especially among children. This not

only affects overall growth and development but even the OJAS [Resistance capacity] may get hampered due to the relapsing and longstanding nature of the disease. 'Dasamoola Haritaki' - could be an ideal drug in Samprapti vighatana of Tamakaswasa. Dasamoola (Root of ten herbs) can act as Shotha hara [Anti-inflammatory], and Vatashamaka and Haritaki would be helpful in restoring the Viloma gati [Upward movement] of Vavu into Anuloma gati [Downward movement], which is essential in Tamakaswasa. At the same time, Haritaki is a potent Rasayana Dravya that can enhance the Ojas. It's Ushna -Kleda hara-Vatanulomaka qualities can also prevent the recurrence of diseases. Hence, Dasamoola Haritaki can serve preventive and soothing needs in Tamakaswasa management.

AIMS AND OBJECTIVES:

The study was undertaken to critically analyse the *Rasa Panchaka* and Mode of Action of *Dasamoo-laHaritaki*'s ingredients in managing Tamakashvasa.

METHODOLOGY

A thorough review of classical textbooks, contemporary textbooks, and research articles is done to evaluate the effect of Dasamoola Haritaki in Tamakashvasa based on Guna, Karma, and Doshaghnata. Dasamoola Hareetaki- is an essential polyhedral formulation with Dasamoola (Root of ten herbs) and Haritaki (Terminalia chebula Retz) as the main ingredients. The quantity of Dasamoola Kwatha (Decoction of roots of ten herbs) used in its preparation is said to be 1 Kamsa pramana, due to which it is also popularly known as Kamsa Haritaki Avaleha. Even though it is described primarily in Shotha Roga [11], it is indicated in several other diseases, such as Jwara (Fever), Meha (Excessive urine flow), Amavata (Rheumatism), Pandu (Anemia), etc.; its clinical usage in the management of Shwasa (Dyspnoea/Asthma) is highly debatable. Rasa panchaka and Dosha Karmukhta of Ingredients of Dasamoola Haritaki Avalehya as per Bhavaprakasha Nighantu^[12]

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Sl.no	Ingredients	Latin Name	Rasa	Guna	Virya	Vipaka	Dosha Karma
1.	Bilwa	Aegle marmelos Linn	Kashaya, Tikta	Laghu, Ruksha	Ushna	Katu	KaphaVatahara
2.	Agnimantha	Premnamucronata Roxb.	Katu, Tikta, Kashaya, Madhura	Laghu, Ruksha	Ushna	Katu	KaphaVatahara
3.	Shyonaka	Oroxylumindicum(L) Benth ex Kurz.	Madhura, Tikta, Kashaya	Guru	Ushna	Katu	Kapha Pitta hara
4.	Patala	Stereospermum Suaveolans (Roxb.)DC	Tikta, Kashaya	Laghu, Ruksha	Ushna	Katu	Tridoshahara
5.	Gambhari	Gmelina arborea Roxb	Tikta, Kashaya, Madhura	Guru	Ushna	Katu	Tridoshahara
6.	Shalaparni	Desmodium Gangeticum DC	Madhura, Tikta	Guru, Snigdha	Ushna	Madhura	Tridoshahara
7.	Prishnaparni	Uraria picta Desv	Madhura	Laghu, Snigdha	Ushna	Madhura	Tridoshahara
8.	Brihati	Solanum indicum Linn.	Katu, Tikta	Laghu, Ruksha, Tikshna	Ushna	Katu	KaphaVatahara
9.	Kantakari	Solanum surattense Burm	Katu, Tikta	Laghu, Ruksha, Tikshna	Ushna	Katu	KaphaVatahara
10.	Gokshura	Tribulusterrestris Linn.	Madhura	Guru, Snigdha	Shita	Madhura	Vata Pitta hara
11.	Haritaki	Terminalia chebula Retz.	Madhura , Amla,Katu, Tikta, Kashaya	Laghu, Ruksha	Ushna	Madhura	Tridoshahara
12.	Yavakshara	Alkaline substance of Hordeum vulgare L.	Kashaya, Madhura	Guru, Ruksha, Sukshma (subtle)	Shita	Katu	Kapha Pitta hara
13.	Guda	Jaggery	Madhura	Laghu, Snigdha	Shita	Madhura	Vata Pitta hara
14.	Madhu	Honey	Madura, Kashaya	Guru, Ruksha, Sukshma	Shita	Katu	KaphaVatahara
15.	Shunthi	ZingiberofficinaleRosc.	Katu	Laghu, Snigdha	Ushna	Madhura	Vatahara
16.	Maricha	Piper nigrum Linn.	Katu	Laghu, Tikshna	Ushna	Katu	KaphaVatahara
17.	Pippali	Piper longum Linn	Katu	Laghu, Snigdha, Tikshna	Anushna- shita	Madhura	KaphaVata hara
18.	Tvaka	Cinnamomnmzeylanicum Breyn	Madhura, Katu, Tikta	Ruksha, Laghu, Tikshna	Ushna	Katu	KaphaVatahara, Pitta Vardhaka
19.	Ela	Elettariacardamomum Maton.	Madhura, Katu	Laghu, Ruksha	Shita	Shita	Tridoshahara
20.	Patra	<i>Cinnamomum tamala</i> Nees and Eberm	Madhura, Tikta, Katu	Ruksha, Laghu, Tikshna	Ushna	Katu	KaphaVatahara

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DISCUSSION

Dasamoola Haritaki is an important polyherbal preparation, which would be an ideal drug for managing *Tamakaswasa* in children. *Dasamoola and Haritaki* as chief Ingredients helps in *Samprapti vighatana* in *Tamakaswasa*.

Most of the ingredients in *Dasamoola Haritaki* are of *Ushna Veerya* in nature, and few are of *Sita Veerya*. *Katu, Tikta, Kashaya* and *Madhura* are the dominant Rasa's. *Laghu, Ruksha, and Tikshna guna's* are the predominant ones, with a few *Gurus, Picchila, and Snigdha Guna's* drugs. Most medicines are *Katu* in *Vipaka* and *Vatakapha Shamaka*, and few are Tridoshahara in nature. This unique pharmacological nature makes the formulation more effective in management and prevents the recurrence of *Tamakaswasa* in children.

Dasamoola, as the name suggests, contains roots from ten different plants. Of these, five are known as Brihadpanchamula and the remaining as Laghu panchamula. [13] It is said to be an effective Shothahara (Anti-inflammatory) and is extensively used in Vata-Kapha predominant diseases [14] as well as in the management of different inflammatory ailments [15] Vata is the main culprit in Tamakaswasa, and Dasamoola could be an effective drug in managing It. *Vata* is believed to be the main factor responsible for the vitiation of the other two doshas, leading to the occurrence of disease. Hence, it is very important to address vitiated Vavu in the management of Tamakashwasa, and Dasamoola is one such miraculous drug in alleviating the vitiated Vata. Haritaki is another primary ingredient in Dasamoola haritaki Rasayana, which is Laghu, Ruksha, Kashaya Pradhana Pancha Rasa (except Lavana), Madhura Vipaka, UshnaVeerya, Rasayani and Vata- Kaphahara in nature [16]. Laghu guna is Lekhana & Ropana in nature [17], whereas Tikshna guna is Sodhana & Kaphavatahrut [18]. Laghu & Tikshna guna act as antagonistic to gunas of Kapha, normalising the Kapha; Ruksha guna does Shoshana[19] & is Kaphahara. [20], which prevents the vitiation of Kapha in Pranavaha srotas. Katu rasa combats the Kapha, clears the obstruction in the Srotas and does Sodhana [21],

whereas Kashaya rasa alleviates the Kapha and Pitta disorders and the Sodhana effect [22]. Tikta rasa has the property of the Lekhana and Kanta-sodhana properties [23] Ushna veerya, contribute to Pachana, Kapha vilayana properties and also a potent Vatakapha samaka [24] Haritaki regularizes the direction of Vata and hence acts as good Vatanulomaka. It mainly acts on Prana Vayu and Apaana Vayu. Apart from that, it's an excellent Antioxidant, anti-bacterial, anti-inflammatory, spasmolytic, -phlegmatic and antitussive [25] Such pharmacological properties of Haritaki may validate its use in Pranavaha sroto vikara, specially Tamakaswasa. Trikatu (Shunthi, Maricha and Pippali) has been reported to increase the bioavailability of drugs. Its Ushna, Teeksha guna and Deepana -pachana properties help prevent Ama formation and vitiation of Kapha. Reported pharmacological activities of *Trikatu* include antiinflammatory, hepatoprotective, antioxidant, antimicrobial, antifungal activity, etc. [26] Yavakshara (ash of Hordeum vulgare) possesses Ushna, Tikshnaguna, Chedana, and Lekhana (scraping action) properties. According to Bhaishajya Ratnavali, Yavakshara is superior and best among other Kshara (alkali). It can also be used as Lekhana karma (scraping action) and has diuretic properties.[27]

CONCLUSION

Tamakaswasa is a very disturbing and most frequently encountered condition in pediatric practice. Sroto avarodha [obstruction of channels] caused by Dushta Kapha and Vata causes Pranavayu to move to Vilomagati. Ayurveda emphasises the importance of Drugs / Formulations that are beneficial in removing the Sroto avarodha and maintaining the physiological equilibrium of Vata and Kapha, with specific guidelines with drugs having Vata-Kapha Hara, Ushna, and Vatanulomana properties Dasamula haritaki – a potent polyherbal preparation with Dasamula and Haritaki as a chief ingredients could be helpful, not only in management of Tamakaswasa by removing the Srotorodha [bronchial obstruction]; but also it can prevent the recurrence of the disease due to its unique pharmacological principles. It could be a boon among children in the field of management of *Tamakaswasa*.

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